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**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER  
37-03

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

10/520777

INTERNATIONAL APPLICATION NO.  
PCT/US03/21988INTERNATIONAL FILING DATE  
14 July 2003PRIORITY DATE CLAIMED  
13 July 2002TITLE OF INVENTION  
Monitoring Signal-to-Noise Ratio in X-Ray Diffraction Data

APPLICANT(S) FOR DO/EO/US

Bi-Cheng Wang; Zheng-Qing Fu; and John P. Rose

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1.  This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2.  This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3.  This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4.  The US has been elected (Article 31).
5.  A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a.  is attached hereto (required only if not communicated by the International Bureau).
  - b.  has been communicated by the International Bureau.
  - c.  is not required, as the application was filed in the United States Receiving Office (RO/US).
6.  An English language translation of the International Application as filed (35 U.S.C. 371(c)(2))
  - a.  is attached hereto.
  - b.  has been previously submitted under 35 U.S.C. 154(d)(4).
7.  Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a.  are attached hereto (required only if not communicated by the International Bureau).
  - b.  have been communicated by the International Bureau.
  - c.  have not been made; however, the time limit for making such amendments has NOT expired.
  - d.  have not been made and will not be made.
8.  An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9.  An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10.  An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

## Items 11 to 20 below concern document(s) or information included:

11.  An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12.  An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13.  A preliminary amendment.
14.  An Application Data Sheet under 37 CFR 1.76.
15.  A substitute specification.
16.  A power of attorney and/or change of address letter.
17.  A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.
18.  A second copy of the published International Application under 35 U.S.C. 154(d)(4).
19.  A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20.  Other items or information: Certificate of Mailing; Return Postcard

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/520777</b>		INTERNATIONAL APPLICATION NO. PCT/US03/21988		ATTORNEY'S DOCKET NUMBER 37-03																					
<p>21. The following fees are submitted:</p> <table> <tr> <td><input checked="" type="checkbox"/> a) Basic national fee.....</td> <td>\$300.00</td> <td>Applicant use</td> <td>Office use only</td> </tr> <tr> <td><input checked="" type="checkbox"/> b) Examination fee.....</td> <td>\$200.00</td> <td>\$</td> <td>300</td> </tr> <tr> <td><input checked="" type="checkbox"/> c) Search fee.....</td> <td>\$500.00</td> <td>\$</td> <td>200</td> </tr> <tr> <td colspan="2"><b>TOTAL OF ABOVE CALCULATIONS = \$1000.00</b></td> <td>\$</td> <td>500</td> </tr> <tr> <td colspan="2"></td> <td>\$</td> <td>1000</td> </tr> </table> <p><input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.</p>						<input checked="" type="checkbox"/> a) Basic national fee.....	\$300.00	Applicant use	Office use only	<input checked="" type="checkbox"/> b) Examination fee.....	\$200.00	\$	300	<input checked="" type="checkbox"/> c) Search fee.....	\$500.00	\$	200	<b>TOTAL OF ABOVE CALCULATIONS = \$1000.00</b>		\$	500			\$	1000
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<b>TOTAL OF ABOVE CALCULATIONS = \$1000.00</b>		\$	500																						
		\$	1000																						
Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE																						
35 - 100 = 0	/50 =		x \$250.00	\$	0																				
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	130																				
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$																					
Total claims	19 - 20 = 0	0	x \$50.00	\$																					
Independent claims	6 - 3 = 3	3	x \$200.00	\$	600																				
MULTIPLE DEPENDENT CLAIM(S) (if applicable)				+	\$360.00																				
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$	1730																				
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.																									
<b>SUBTOTAL =</b> \$ 865																									
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).																									
<b>TOTAL NATIONAL FEE =</b> \$ 865																									
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property																									
<b>TOTAL FEES ENCLOSED =</b> \$ 865																									
<table> <tr> <td>Amount to be refunded:</td> <td rowspan="2"></td> <td>\$</td> </tr> <tr> <td>Amount to be charged</td> <td>\$</td> </tr> </table>						Amount to be refunded:		\$	Amount to be charged	\$															
Amount to be refunded:		\$																							
Amount to be charged		\$																							
<p>a. <input checked="" type="checkbox"/> A check in the amount of \$ <u>865.00</u> to cover the above fees is enclosed.</p> <p>b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>07-1969</u>. A duplicate copy of this sheet is enclosed.</p> <p>d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. <b>Credit card information should not be included on this form.</b> Provide credit card information and authorization on PTO-2038.</p>																									
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.																									
SEND ALL CORRESPONDENCE TO:																									
GREENLEE, WINNER and SULLIVAN, P.C.																									
4875 Pearl East Circle, Suite 200																									
Boulder, CO 80301																									
(303) 499-8080																									
(303) 499-8089 (fax)																									
1/07/05																									
																									
SIGNATURE																									
Stephen B. Barone																									
NAME																									
53,968																									
REGISTRATION NUMBER																									

10/52077

DT 1 sec'd PCT/PTO 07 JAN 2005

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Attorney Docket No.: 37-03

Applicant(s): Wang et al.  
Serial No.: Unassigned  
371 Filing Date: Unassigned  
Title: **Monitoring Signal-to-Noise Ratio in X-Ray Diffraction Data**

I hereby certify that the following correspondence:

1. **Transmittal Letter to DO/EO/US Concerning a Submission under 35 USC 371 (2 pages)**
2. **Copy of WO 2004/013683 A2 (37 pages)**
3. **Application Data Sheet – 3 pages**
4. **Unexecuted Joint Inventors' Declaration and Power of Attorney – 3 pages**
5. **Check in the amount of \$865.00 USD**
6. **Preliminary Amendment (3 pages)**
7. **Return Postcard**

Is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to:

Mail Stop PCT  
Commissioner for Patents,  
PO Box 1450  
Alexandria, VA 22313-1450

On January 7, 2005

Kay Speaker

(Typed or Printed Name of Person Mailing Correspondence)



(Signature of Person Mailing Correspondence)

EV 584 576 990 US

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